ASSEMBLY SEQUENCE

1. GLUE TOGETHER THE SPAR, HORN POST, & COMPRESSION RIB, USING TWO ANGLES & 14 NO. 3 F.H. WOOD SCREWS & LOCK WASHERS.
2. ATTACH THE TRAILING EDGE BOW, USING BOW CLIPS & THE CONTROL WIRE CLIP AT EACH JOINT. CUT 6d COMMON NAILS TO LENGTH AND USE WITH WASHER AS RIVETS.
3. COVER WITH FABRIC AS SPECIFIED HEREIN.
4. DIMPLE STAY CLIPS & PLACE ON BOW.
5. ATTACH STAY WIRES TO HORN POST USING 5/16 BOLTS WITH NUT & LOCK WASHER.
6. ATTACH STAY WIRES TO CLIPS USING PIANO WIRE ENDS.
7. ATTACH STAY WIRES TO SPAR AT TRAILING EDGE, ADJUSTING TENSION TO MAINTAIN THE BOW IN A FLAT PLANE.
8. SHRINK FABRIC BY SPRAYING WATER & ALLOWING TO DRY.
9. APPLY LIGHT COAT OF SHELLAC TO FABRIC WHEN TAUT.
10. T-HINGES & CONTROL WIRES MAY BE LEFT AT FINAL ASSEMBLY OF GLIDER.

STAY ANCHOR DETAIL - FULL SIZE
2 REQD. - STEEL

CONTROL WIRE CLIP DETAIL - FULL SIZE
1 REQD. - STEEL

PIANO TWIST WIRE END - FULL SIZE

ADJUSTABLE WIRE END - FULL SIZE

PICTORIAL DRAWING
FABRIC COVERING NOT SHOWN

COMPRESSION RIB DETAIL 1/5 SCALE
1 REQD. - ASH

HORN POST DETAIL 1/5 SCALE
1 REQD. - ASH

SECTION B-B
FULL SIZE

SECTION A-A
FULL SIZE

17 3/4 (TYP.)
SPAR
STAY WIRE 12 REQD.
LONGERON
T-HINGE
BOW CLIP
TRAILING EDGE BOW 3/4 X 5/8 X 144 SEND TO JIG TO 45° RAKE & SAND CORNERS OFF TO APPROX. 1/16 RADIUS

PLAN VIEW
HORIZONTAL TAIL ASSEMBLY 1/5 SCALE

SPAR DETAIL 1/2 SCALE
1 REQD. - ASH

TRAILING EDGE BOW
DRILL ON ASSY FOR NAIL
SPAR
DIMPLE BOTH SIDES AT ASSY.
MINIMUM BEND RADIUS
UPSET NAIL ON A 1/4 DIA. WASHER AT ASSY. (2 PLACES)
MINIMUM BEND RADIUS
DRILL & CSINK 1 PLACE FOR NO. 8 F.H. WOOD SCREW
1/16 R. (TYP.)

BOW CLIP DETAIL - 2 REQD.
FULL SIZE - STEEL

UNBLEACHED MUSLIN COVERING
SEAM
HEM & STITCH
TRAILING EDGE BOW
1/2-INCH CARPET TACKS AT 1-INCH INTERVALS. USE 3/4-INCH TACKS NEAR CHAIN TIPS.

FABRIC COVERING DETAILS - FULL SIZE

ANGLE DETAIL - FULL SIZE
2 REQD. - STEEL

STAY CLIP DETAIL - 6 REQD
FULL SIZE - STEEL

SIDE VIEW
HORIZONTAL TAIL ASSEMBLY 1/5 SCALE

5. REMOVE ALL BURRS AND SHARP EDGES FROM ALL METAL PARTS.
4. ALL WIRES TO BE 16 TO 20 GAGE STEEL.
3. ALL SHEET METAL PARTS TO BE MADE FROM 18 TO 20 GAGE MILD STEEL.
2. ALL WOOD PARTS TO BE FINISHED WITH LINSEED OIL & RUBBED.
1. ALL WOOD TO BE CLEAR, STRAIGHT GRAINED WITH NO KNOTS.

NOTES: UNLESS OTHERWISE SPECIFIED.

MONTGOMERY 1883 GLIDER	
HORIZONTAL TAIL - COMPLETE ASSEMBLY & DETAILS	
PREPARED BY: San Diego Section, Institute of the Aeronautical Sciences	
DRAWN BY: Mr. Carl S. Herkimer	SHEET NO. 3
CHECKED BY:	SCALE: AS NOTED
APPROVED FOR I.A.S.	